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NATIONWIDE ENVIRONMENTAL SERVICES, INC.
4251 Kipling • Suite 440
Denver, Colorado, 80033

April 24, 2008

Via e-mail & USPS

Ms. Shari Kolak
Remedial Project Manager
U.S. Environmental Protection Agency
77 West Jackson Boulevard, HSRM-6J
Chicago, IL 60604

Mr. Thomas Williams
Illinois Environmental Protection Agency
P.O. Box 1515
LaSalle, IL 61301

RE: Southeast Rockford Ground Water NPL Site
QAPP Addendum

Dear Ms. Kolak & Mr. Williams:

On behalf of the City of Rockford (City), Nationwide Environmental Services, Inc. (NES) is providing the U.S. Environmental Protection Agency (USEPA) with an addendum to the Quality Assurance Project Plan (QAPP) for the Southeast Rockford Ground Water NPL Site (Site). The reason for the QAPP addendum is to update the analytical requirements for the Site. Currently, contract laboratory program (CLP) methods are required for the Site. Based on nearly 10 years of analytical data collected; the USEPA acceptance of analytical methods other than CLP for Superfund sites; and the dwindling of laboratories qualified to perform CLP analyses and those actually performing CLP analyses, another USEPA approved analytical method is proposed for the analysis of ground water monitoring samples. This method includes quality control criteria that are generally consistent with, and in some cases more rigorous than, the CLP methods.

Please contact Mr. Brian LaFlamme or me at (303) 232-2134 if you have any questions regarding the information provided or require any additional information.

Sincerely,

William B. Dotterrer,

William B. Dotterrer,
Sr. Project Manager

cc: Wally Parson, City of Rockford
NES file

Enclosure

QUALITY ASSURANCE PROJECT PLAN ADDENDUM
REMEDIAL DESIGN/REMEDIAL ACTION
SOUTHEAST ROCKFORD GROUND WATER CONTAMINATION SITE
ROCKFORD, ILLINOIS

April 24, 2008

by

William B. Dotterrer
William Dotterrer
NES Project Manager

NES Project: 1016-2

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Southeast Rockford Ground Water Contamination Site
Quality Assurance Project Plan Addendum

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Southeast Rockford Ground Water Contamination Site
RD/RA QAPP Addendum Summary.

The Quality Assurance Project Plan (QAPP) was prepared for the Ground Water Response Action at the Southeast Rockford Ground water Contamination Site (Site) by Nationwide Environmental Services Inc., (NES) for the City of Rockford (City) and submitted in September 1998 as a deliverable in accordance with the US Environmental Protection Agency (USEPA) Statement of Work (SOW) and Consent Decree (CD). The Site QAPP was prepared by NES in accordance with USEPA QAPP guidance documents, in particular, the Contract Laboratory Program (CLP) guidelines (USEPA, 1986d), Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans (USEPA, 1986b), the Region V Model QAPP (USEPA, 1991c) and the EPA Requirements for Quality Assurance Project Plans For Environmental Data Operations, (USEPA, 1993).

The CD issued for the Site required that environmental monitoring and measurement efforts mandated or supported by USEPA participate in a centrally managed quality assurance (QA) program. Any party generating data under this program has the responsibility to implement minimum procedures to assure that the precision, accuracy, representativeness, completeness, and comparability (PARCC) of its data are known and documented. To ensure this responsibility is met uniformly, each party is to prepare a written QAPP covering each project it is to perform.

The QAPP submitted to USEPA to meet Site monitoring and analytical requirements of the selected remedy presented the organization, objectives, functional activities, and specific quality assurance (QA) and quality control (QC) activities associated with the performance of the Remedial

Design and Remedial Action (RD/RA) at the Site. The QAPP also described the specific protocols to be followed for sampling, sample handling and storage, chain of custody, and laboratory analysis. The QAPP is a companion document to the RD/RA Work Plan prepared for the ground water monitoring network construction component of the Site remedy and addressed the Site remedial design, construction and operation and maintenance phases to be performed to complete the remedial actions contained in the RD/RA Work Plan. The Field Sampling Plan (FSP), and the Health and Safety Plan (HASP), are also companion documents to the RD/RA Work Plan submitted to the USEPA during the start-up phase of the remedy construction in September 1998, and together with the RD/RA Work Plan are intended to guide personnel in the conduct and reporting of activities associated with the performance of the RD/RA Work Plan.

The remedy design and construction phases of the ground water monitoring network component of the remedy were completed in September 1999 and long-term operation and maintenance (O&M) is now occurring. Remedy construction completion was documented in the Remedial Action Report issued in September 1999. A Five Year Review was conducted for the Site in May 2003 by USEPA and the Site was determined to remain operational, functional, and protective of human health and the environment. Current O&M activities for the ground water monitoring network principally involve collection and analysis of samples from established ground water monitoring locations, and maintaining the well heads to preserve access to the wells

The procedures identified in the RD/RA QAPP have been implemented in accordance with applicable professional technical standards, USEPA requirements, government regulations and guidelines, and specific project goals and requirements since inception of the Site RD/RA project

construction activities in 1998. However, the nearly 10 years of sampling and analyses and changing environmental laboratories necessitate a change in analytical methods. Therefore, the purpose of the QAPP addendum is to document the analytical methods that will be performed in the laboratory.

Ground Water Analyses

The availability of laboratories qualified to perform CLP analytical methods and data package requirements has dwindled over the nearly 10 years of monitoring at the Site. Coupled with the nearly 10 years of ground water monitoring data and the existence/acceptance of other analytical methods, the need for CLP analytical methods is no longer necessary for the analyses of ground water samples at the Site. EPA recognizes that CLP methods are not required for Superfund sites when it stated *"Contrary to widespread opinion [see Reference 1, Note 4], EPA policy does NOT "approve" (in a restrictive sense) which specific analytical methods may be used to generate most of the analytical chemistry data used within the "waste programs" (such as the RCRA, Superfund, or other contaminated site cleanup programs)."* (EPA 542-R-01-015, October 2001)

The USEPA approved SW-846 8260B analytical method proposed for the analysis of ground water monitoring samples include QC criteria and reporting limits generally consistent with, and in some cases more rigorous than, the CLP methods. The compounds and reporting limits for the ground water samples are provided in **Table 2.3**.

Table 2.3: Volatile Organic Compounds and Method Reporting Limits for Ground Water Sample Analyses

CAS Number	Compound	Estimated Quantitation Limits[1] (µg/l)	Remediation Goals for Ground Water (µg/l)
74-87-3	Chloromethane	1.0	
74-83-9	Bromomethane	1.0	
75-01-4	Vinyl chloride	1.0	
75-00-3	Chloroethane	1.0	
75-09-2	Methylene chloride	1.0	5
67-64-1	Acetone	5.0	
75-15-0	Carbon disulfide	5.0	
75-35-4	1,1-Dichloroethene	1.0	4
75-35-3	1,1-Dichloroethane	1.0	700
156-59-4	cis-1,2-Dichloroethene	1.0	10
156-60-5	trans-1,2-Dichloroethane	1.0	10
67-66-3	Chloroform	1.0	0.15
107-06-2	1,2-Dichloroethane	1.0	5
73-93-3	2-Butanone[2]	5.0	
74-97-5	Bromochloromethane	1.0	
71-55-6	1,1,1-Trichloroethane	1.0	10
56-23-5	Carbon tetrachloride	1.0	
75-27-4	Bromodichloromethane	1.0	
78-87-5	1,2-Dichloropropane	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	
71-01-6	Trichloroethene	1.0	5
124-48-1	Dibromochloromethane	1.0	
79-00-5	1,1,2-Trichloroethane	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	
71-43-2	Benzene	1.0	
75-25-2	Bromoform	1.0	
108-10-1	4-Methyl-2-pentanone	5.0	
591-78-6	2-Hexanone	5.0	
127-18-4	Tetrachloroethene	1.0	5
79-34-5	1,1,2,2-Tetrachloroethane	1.0	
106-93-4	1,2-Dibromomethane	1.0	
108-88-3	Toluene	1.0	
108-90-7	Chlorobenzene	1.0	
100-41-4	Ethylbenzene	1.0	
108-42-5	Styrene	1.0	
1330-20-7	Total xylenes	2.0	
541-73-1	1,3-Dichlorobenzene	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	
96-12-8	1,2-Dibromo-3-chloropropane	1.0	

Source: U.S. Environmental Protection Agency SW-846 Method 8260B.

[1] Estimated Quantitation limits (EQL) are matrix-dependent, and listed quantitation limits may not always be achievable. Actual quantitation limits attained may be reported by the laboratory. Concentrations detected between the method detection limit and EQL will be reported as estimated.

µg/l = micrograms per liter

CAS = Chemical Abstract Service